Amendments to the Claims:

Listing of Claims:

1. (Currently Amended) A shape memory alloy having a lowered martensitic transformation temperature by about 80° C from said alloy's initial martensitic transformation temperature, said alloy comprising Copper and Zinc in the range of 62-86% of Copper and 10-28% of Zinc along with 6% of Aluminum and prepared by a process comprising the following steps of:

(i) selecting an alloy comprising Copper and Zinc in the range of 62-86% of Copper and 10-28% of Zinc along with 6% of Aluminum;

(ii) melting alloy composition in an induction furnace operating in air under charcoal cover followed by casting into desired shapes;

(iii) homogenizing the above composition at 800° C for a period of about two hours followed by cooling;

(iv) surface machining for removing oxide scale formation;

(v) analyzing the alloy composition

(vi) re-heating the shaped material at about 575° C for about three minutes;

(vii) quenching said material with cold water;

(viii) obtaining a fully martensitic structure;

(ix) identifying the soft shape memory material with martensitic structure; and

(x) recording the temperature and structure of the material.

2. Cancelled.

3. (Original) A shape memory alloy as claimed in claim 1, wherein said alloy displays good shape memory at a re-betatising temperature of about 575° C.

4. (Original) A shape memory alloy as claimed in claim 1, wherein said alloy having good fatigue properties thereby preventing quench cracking.

5. Cancelled.

6. (Original) A shape memory alloy as claimed in claim 1, wherein said alloy having good shape memory response properties.

7. (Withdrawn) A process for lowering the Martensitic Transformation Temperature (As) of shape memory alloy as claimed in claim 1, by a re-betatising treatment of previously high temperature betatised material, said process comprising the following steps of:

(xi) selecting an alloy comprising Copper and Zinc in the range of 62-86% of Copper and 10-28% of Zinc along with 6% of Aluminum;

(xii) melting alloy composition in an induction furnace operating in air under charcoal cover followed by casting into desired shapes;

(xiii) homogenizing the above composition at 800° C for a period of about two hours followed by cooling;

(xiv) surface machining for removing oxide scale formation;

(xv) analyzing the alloy composition

(xvi) re-heating the shaped material at about 575° C for about three minutes;

(xvii) quenching said material with cold water;

(xviii) obtaining a fully martensitic structure;

(xix) identifying the soft shape memory material with martensitic structure; and

(xx) recording the temperature and structure of the material;

8. (Withdrawn) A process as claimed in claim7, wherein the martensitic transformation temperature (As) is lowered by about 80° C.

9. (Withdrawn) A process as claimed in claim 7, wherein the loss of Zinc or Aluminum raises the martensitic transformation temperature whereas increase of these elements lowers the transformation temperature.

10. (Withdrawn) A process as claimed in claim 7, wherein material once cast and processed can be utilized for some other temperature device or application.

11. (Withdrawn) A process as claimed in claim 7, wherein shape memory response properties are not affected.

12. (Withdrawn) A process as claimed in claim 7, wherein the two-step betatising and resultant lowering of transformation temperature is valid for higher Aluminum content of 6-10% shape memory alloys.